

ASTAF'YEV, F.S., inzh.; LISOGOR, A.A., inzh.

Stationary thermocouple to control bell furnace annealing of
rolled metal in coils. Stal' 21 no.5:461-464 My '61.

(MIRA 14:5)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Annealing of metals) (Thermocouple)

ACCESSION NR: AR4041590

8/0137/64/000/C05/D028/D028

SOURCE: Ref. zh. Metallurgiya, Abs. 5D160

AUTHOR: Astaf'yev, F. S.; Vokhomskiy, N. S.; Zlatoustovskiy, D. M.; Ivantsov, G. I.; Prished'ko, V. N.; Selivanov, N. M.

TITLE: Changes of structural state and hardness of hardened layer of working roller of continuous sheets of cold rolling mills as a result of exploitation

CITED SOURCE: Sb. nauchn. tr. Magnitogorskiy gornometallurg. in-t, vy'p. 28, 1963,
282-506

TOPIC TAGS: cold roller, working roller, structural state, hardness

TRANSLATION: On the basis of conducted investigations of rollers of cold rolling, the following conclusions can be made. The requirements of GOST 3541-57 for active layer thickness of cold rolling working rollers are met nearly twofold for hardened rollers after flame heating and current of industrial frequency with triple pre-heating. For hardened rollers after heating current of industrial frequency with a single preheating and volume heating, thickness of active layer is one third less

Card 1/3

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amounts to ~~as~~ 30% of the total amount of working rollers of cold rolling.

SUB CODE: MM

ENCL: 00

Card 3/3

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CIA-RDP86-00513R000102410020-1"

LEVASHEV, Yevgeniy Dmitrievich, inzh.; ASTAF'YEV, Gavriil Kirikovich, inzh.;
AL'TSHULER, Grigoriy Aleksandrovich, ekonomist; YAKOVLEV, D.V.,
inzh., red.; VERINA, G.P., tekhn.red.

[Operation of electric railroads] Elektrotiagovoe khozisistvo.
Moskva, Gos. transp. zhelez-dor. izd-vo, 1958. 386 p. (MIRA 12:2)
(Electric railroads--Management)

LEVASHEV, Ye.D., inzh.; ASTAF'YEV, G.K., inzh.; GURETSKIY, S.A.,
inzh.; MIRONOV, K.A., inzh.; Prinimal uchastiye STRUCHKOV,
Ye.I., inzh.; VINYNICHEMKO, N.G., kand. ekon. nauk, retsenzent;
KULAGIN, N.N., inzh., retsenzent; NEVEZHIN, P.P., inzh.,
retsenzent; KALININ, V.K., kand. tekhn. nauk, red.; KHITROVA,
N.A., tekhn. red.

[Economics, organization, and planning of electric transport]
Ekonomika, organizatsiya i planirovanie elektrotiagovogo kho-
ziaistva. [By] E.D.Levashov i dr. 2., perer. izd. Moskva,
Transsheldorizdat, 1963. 286 p. (MIRA 1619)
(Electric railroads—Management)

Astaf'yev, Georgiy Pavlovich, Shebshayevich, Valentin Semeovich
and Yurkov, Yuriy Alekseyevich

PHASE I BOOK EXPLOITATION 619

Astaf'yev, Georgiy Pavlovich, Shebshayevich, Valentin Semeovich
and Yurkov, Yuriy Alekseyevich

Radionavigatsionnye ustroystva i sistemy (Radionavigational
Devices and Systems) Moscow, Izd-vo "Sovetskoye radio", 1958.
863 p. Number of copies printed not given.

Eds.: Ilyukhin, V.F. and Volkova, E.M.; Tech. Ed.: Koruzev, N.N.

PURPOSE: The book is a textbook for students of higher military
schools as well as higher technical schools (vtuz). It may be
used by engineers and technicians engaged in the field of radio
navigation.

COVERAGE: The book gives an account of the theory and basic
principles of operation of present-day radio devices and systems
used for navigation. General characteristics of radionavigational

Card 1/16

Radionavigational Devices and Systems 619

TABLE OF CONTENTS:

Preface	3
Introduction	5

SECTION 1. GENERAL CHARACTERISTICS OF
RADIONAVIGATIONAL DEVICES AND SYSTEMS

Ch. I. Problems and Characteristics of Radionavigational Devices and Systems	9
1. Purpose of radionavigational devices and systems	9
2. Basic tactical and technical requirements of radionavigational devices and systems	15
3. Principles of construction and classification of radionavigational devices and systems	17
Ch. II. Basic Information on Air Navigation	24

Card 3/16

Radionavigational Devices and Systems 619

2. Equal probability error curves of aircraft position determination	76
3. Plotting the error ellipse	81
4. Dimensions of the error ellipse	83
5. Operating range of the radionavigational system	87

SECTION 2. AMPLITUDE RADIONAVIGATIONAL
DEVICES AND SYSTEMS

Ch. V. General Characteristics of Amplitude Radionavigational Devices and Systems	92
1. Introduction	92
2. Methods of assignment and determination of directions in space	96
3. History of amplitude radionavigational devices in our country	99
Ch. VI. Methods of Indication in Amplitude Radionavigational Devices	102

Card 5/16

Radionavigational Devices and Systems 619

6.	Non-directional effect of directional antennas	203
7.	Control of directional characteristics	207
Ch. IX. Amplitude Radio Direction Finders		217
1.	General information on amplitude radio direction finders	217
2.	Minimum signal direction finding	220
3.	Maximum signal direction finding	240
4.	Direction finding by comparison of received signals	247
5.	Amplitude modulation of received signals	252
6.	Direction findings by minimum degree of modulation of received signals	269
7.	Direction finding by comparing the degree of modulation of received signals	277
Ch. X. Amplitude Radio Beacons		281
1.	Classification of radio beacons	281
2.	Radio marker beacons	286
3.	Radio range beacons	290
4.	Direction finding radio beacons	335

Card 7/16

Radionavigational Devices and Systems 619

Ch. XIII. Methods of Indication in Phase Radionavigational Devices	414
1. General information on phase difference measurement	414
2. Direct methods of measuring phase difference	415
3. Compensation methods of measuring phase difference	423
Ch. XIV. Phase Radionavigational Ranging Devices	432
1. Ranging devices with measurement of phase difference at high frequencies	432
2. Ranging devices with measurement of phase difference at modulation frequency	441
3. Ranging devices with measurement of phase difference at beat frequency	442
4. Ranging devices with preservation of initial phase by standard frequency generator on board	448
Ch. XV. Phase-difference Ranging Systems	450
1. General characteristic of systems	450

Card 9/16

Radionavigational Devices and Systems 619

SECTION 4. FREQUENCY RADIONAVIGATIONAL
DEVICES AND SYSTEMS

Ch. XVII. General Characteristics of Frequency Radionavigational Devices and Systems	518
1. Classification, applications, and stages of development of frequency radionavigational devices and systems	518
2. Theoretical bases of frequency radio-altimeter operation	526
Ch. XVIII. Frequency Radio Altimeters and Frequency Radionavigational Systems	546
1. Typical frequency radio altimeter	546
2. Frequency radio altimeters eliminating discrete readings	560
3. Frequency radio altimeters with intermediate- frequency amplification	568
4. Frequency-difference ranging systems	570

Card 11/16

Radionavigational Devices and Systems	619
Ch. XXI. Pulse Radio Altimeters	611
Ch. XXII. Pulse Radionavigational Ranging Systems	619
1. Pulse ranging devices for air navigation	619
2. Aircraft pulse-interrogation ranging system used for air navigation and bombing	628
3. Ground pulse-interrogation ranging systems used for bombing	638
4. System of ranging and angle measurement for aircraft homing	640
Ch. XXIII. Pulse-difference Radionavigational Ranging Systems	642
1. Principle of operation of pulse-difference radionavigational ranging systems	642
2. Pulse-difference radionavigational ranging systems with independent and synchronized operation of radio station	650

Card 13/16

Radionavigational Devices and Systems	619
4. Simplified landing systems	740
5. General information on lighting equipment for landing systems	748
Ch. XXVI. Airport Dispatching Equipment and Systems	752
1. Requirements of airport dispatching equipment	752
2. Technical facilities of dispatching service	754
3. Standard dispatching equipment	762
Ch. XXVII. Instrument Landing Systems	768
1. General information	768
2. Localizer equipment used in standard systems	770
3. Glide-path equipment used in standard systems	793
4. Instrument landing systems operating in the centimeter and decimeter bands	802
5. Example of an instrument landing system	811
6. Automatic landing control	815
Ch. XXVIII. Ground Controlled Approach Systems	818
1. General characteristics of landing systems	818
Card 15/16	

Radionavigational Devices and Systems	619
2. Non-automatic ground controlled approach	820
3. Ground controlled approach with computers	833
4. Ground controlled approach with autopilot	838
Conclusion	848
Bibliography	851
AVAILABLE: Library of Congress	
Card 16/16	JP/ksv 10-14-58

ASTAF'YEV, G.P.; SHEBSHAYEVICH, V.S.; YURKOV, Yu.A.; BELYAKOV, A.V., prof.,
Geroy Sovetskogo Soyuza, doktor geogr. nauk, retsenzent;
SOLOMYANYY, V.P., kand. tekhn. nauk, dots., retsenzent;
ZABOLOTSKIY, N.G., red.; BELYAYEVA, V.V., tekhn. red.

[Airborne radio navigation apparatus] Radiotekhnicheskie sredstva
navigatsii letatel'nykh apparatov. [By] G.P. Astaf'ev i dr. Moskva,
Sovetskoe radio, 1962. 962. (MIRA 16:3)

(Radio in navigation)
(Airplanes—Electronic equipment)

Modern equipment for intestinal surgery 121

Novye khirurgicheskie apparaty i instrumenty i opyt ikh primeneniye (New SURGICAL Equipment and Instruments and Experience in Their Use) No. 1, Moscow, 1957. A collection of Papers of the Scientific Research Inst. for Experimental Surgical Equipment and Instruments.

NIIKhAul

KALININA, T.V., kandi.med.nauk; ASTAF'YEV, G.V.

Enterorrhaphy with mechanical suture. Vest.khir. 79 no.7:129-132
Jl '57. (MIRA 10:10)

1. Iz nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. - M.G.Anan'yev). Adres avtora: Moskva,, I-81 Fabrichnaya liniya, d.6, Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.

(INVESTIGATES, surgery
enterorrhaphy with mechanical suture (Rus))
(SUTURES,
mechanical in enterorrhaphy (Rus))

ASTAF'YEV, G.V.; KRYAZHEVA, Ye.G.

A holder for the ureter. Nov.khir.arkh. no.3:1.07-108 My-Je
'59. (MIRA 12:10)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov Ministerstva zdravookhraneniya SSSR.

(SURGICAL INSTRUMENTS AND APPARATUS)

ASTAF'YEV, G.V.; FEDOROV, S.F., kard.med.nauk

New cold-light surgical mirror. Voen.med.zhur. no.5:85..86
Mv '59. (MIRA 12:8)

(APPARATUS AND INSTRUMENTS,
cold-light speculum (Rus))

BABKIN, S.I.; ASTAF'YEV, G.V.; KRIAZHEVA, Yu.G.

Trocars- extractor for biopsy of the prostate gland. Urologia
24 no.6: 57-59 '59. (MIRA 13:12)
(PROSTATE GLANDS--DISEASES) (BIOPSY)

ASTAF'YEV, G.V.; FEDOROV, S.F.

Lighted speculums for gynecological use. Akush.i gin. 35 no.4:98-
101 Jl-Ag '59. (MIRA 12:11)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirur-
gicheskoy apparatury i instrumentov (dir. M.G. Anan'yev) Ministerstva
zdravookhraneniya SSSR.

(ENDOSCOPY equipment & supply)
(GYNECOLOGY equipment & supply)

KASULIN, V.S.; KALININA, T.V.; ASTAF'YEV, G.V.

Apparatus for cholangiometry. Med.prom. 41 no. 4:52-53 Ap '60.
(MIRA 13:6)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirur-
gicheskoy apparatury i instrumentov.

(MEDICAL INSTRUMENTS AND APPARATUS)
(BILIARY TRACT--DISEASES--DIAGNOSIS)

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CIA-RDP86-00513R000102410020-1

DUNAEVSKIY, L.I.; ASTAF'YEV, G.V.; KRYAZHEVA, Ye.G.

Guide for the retrograde introduction of catheters. Urologia 26
no.2:66-67 '61. (MIRA 14:3)
(CATHETERS)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

ROGOVIN, V.Ye.; ASTAF'YEV, G.V.; KRYAZHEVA, Ye.G.

New self-retaining surgical vaginal speculum. Akush.i gin.
37 no.2:103-105 F '61. (MIRA 14:3)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy
khirurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev).
(SPECULUM (MEDICINE))

OZHGIKHIN, A.N.; ASTAF'YEV, G.V.; ANTOSHINA, N.V.

Boomerang needle holder with an automatic thread dispenser. Med. prom.
16 no.3:57-58 Mr '62. (MIRA 15:5)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy
apparatury i instrumentov.
(SUTURES—EQUIPMENT AND SUPPLIES)

A5TAF'YEV, G.V.; ANISIMOVA, M.I.; GRITSMAN, Yu.Ya.

Holder for the rectal mucosa. Vest.khir. no.5:91-94 '62.

(MIRA 15:11)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy
khirurgicheskoy apparatury i instrumentov (dir. - M.G. Aran'yev)
Ministerstva zdravookhraneniya SSSR.
(SURGICAL INSTRUMENTS AND APPARATUS)

KALININA, T.V.; ASTAF'YEV, G.V.; KASULIN, V.S.

Instruments and apparatus for operations on the biliary tract.
Trudy NIIEKHAI no.5:258-263 '61. (MIRA , 5:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.
(BILIARY TRACT--SURGERY) (SURGICAL INSTRUMENTS AND APPARATUS)

AS/FIT 150-247

128

PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primenenie
(Synthetic Zeolites: Production, Investigation, and Use). Mos-
cow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady)
Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh
nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor
of Chemical Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P.
Golub'.

PURPOSE: This book is intended for scientists and engineers engaged
in the production of synthetic zeolites (molecular sieves), and
for chemists in general.

Card 1/123

Synthetic Zeolites: (Cont.)

SOV/6246

COVERAGE: The book is a collection of reports presented at the First Conference on Zeolites, held in Leningrad 16 through 19 March 1961 at the Leningrad Technological Institute imeni Lensovet, and is purportedly the first monograph on this subject. The reports are grouped into 3 subject areas: 1) theoretical problems of adsorption on various types of zeolites and methods for their investigation, 2) the production of zeolites, and 3) application of zeolites. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

Foreword	3
Dubinin, N. N. Introduction	5

Card 2/18 5

Synthetic Zeolites: (Cont.)

SOV/6246

- Kel'tuev, N. V., I. P. Ogleblina, and N. S. Torocheshnikov.
Regeneration of Zeolites in a Gas Stream 203
- Vaynateyn, S. M., G. V. Astaf'yav, Ye. Ya. Giyenko, N. I.
Lulova, and A. T. Slepneva. Methods of Plant and Quality
Control of Finished Products During Manufacture of Zeolite
A Type Adsorbents 212

APPLICATION OF ZEOLITES

- Kiselev, A. V., Yu. A. El'tekov, and V. N. Semenova. Ad-
sorption of a Mixture of Thiophene and Heptane on
Zeolite NaA 218
- Pavlova, L. F. Adsorption From n-Hexane-Benzene Solutions
With Synthetic Zeolite CaA 225

Card 9/18 3/9

ASTAF'YEV, G.V. i KRYAZHEVA, Ye.G.; ROGOVIN, V.Ye., zasluzhennyj vrach RSFSR
[deceased]

New instruments for obstetrical and gynecological practice. Akush.
i gin. 38 no.5:107-110 S-0 '62.

(MIRA 17:11)

1. Iz nauchno-issledovatel'skogo instituta eksperimental'noy khi-
rurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev).

ANTOSHINA, N.V.; ASTAF'YEV, G.V.; BARKIN, S.I.; GLAVIN, N.F.;
BELEN'KIY, V.A.; BEGGIN, I.P.; BOBROV, B.S.;
VOLKOV, A.M.; GRITSMAN, Yu.Yu.; KUKUSHKIN, L.I.; PERERELKIN,
V.P.; FETROVA, N.P.; GESELEVICH, A.M., red.; DEMKHTYAR', Ye.G.,
red.

[New surgical apparatus and instruments; a practical manual
for physicians, students of senior courses at medical insti-
tutes and surgical nurses] Novye khirurgicheskie apparaty i
instrumenty; prakticheskoe rukovodstvo dlia vrachei, studen-
tov starshikh kursov meditsinskikh institutov i operatsion-
nykh sester. Moskva, Meditsina, 1964. 253 p.

(MIRA 18:3)

KALININA, T.V.(Moskva,D-315,ul.Chasovaya,d.27/12,pod.1,komm.22); BABKIN, S.I.;
KASULIN, V.S.; ASTAF'YEV, G.V.

Mechanical suture for esophago-intestinal (gastric) anastomosis.
Klin.khir. no.8:81-82 J1 '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov.
(SUTURES) (ALIMENTARY CANAL--SURGERY)

1. ASTAF'YEV, G. V.
2. USSR (600)
4. Economic Conditions - China
7. Economy of the Chinese People's Republic improves greatly. Vest. stat. no. 5: 1952

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ASTAF'YEV, G. ✓

"The People's Republic of China on the Road to Socialist Industrialization,"
Planovoye Khozyaystvo, No 6, pp 71-84, 1954

Translation - M-398, 28 Apr 55

WBI, TZU-CH'U; KISELEV, M.A. [translator]; ASTAF'YEV, G.V., otvetstvennyy
redaktor; USVIATSOV, A.Ye., redaktor Izdatel'stva; ASTAF'Yeva, G.A.,
tekhnicheskiy redaktor

[Capital investments of the imperialists in China (1902-1945).
Translated from the Chinese] Kapitalovlozheniya imperialistov v
Kitae (1902-1945). Perevod s 3-go kitaiskogo izd. M.A.Kiseleva.
Moskva, Izd-vo Akademii nauk SSSR, 1956. 48 p. (MLRA 9:8)
(China--Foreign economic relations)

ASTAF'YEV, I. [Astaf'eu, I.]

For you, our women! Rab.i sial. 35 no:3:1-2 Mr '59. (MIRA 12:3)

1. Zamestitel' nachal'nika Upravleniya logkoy promyshlennosti sov-narkhoza BSSR.
(White Russia--Textile industry) (Clothing and dress)

ASTAF'YEV, I. F.

Astaf'yev, I. F.: "The types of formations and the length of graft of the grape vine in the old vineyards of Tadzhikistan", Byulleten' po plodovodstvu, ovoshchеводству i vinogradarstvu, No. 9, 1948, p. 87-95.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

1. ASTAF'YEV, I. M.
2. USSR (600)
4. Shoe Industry - White Russia
7. Shoe industry of the White Russian S.S.R., Leg. prom., 12, No. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

ASTAF'YEV, Ivan Mikhaylovich [Astaf'eu, I.M.]; BUROV, A. [Burau, A.], red.;
STEPANOVA, N. [Stsyapanava, N.], tekhn.red.

[Light industry of White Russia] Liogkaia pramyslovasts' BSSR.
Minsk, Dziarzh. vyd-va BSSR, Red. palit. lit-ry, 1957. 27 p.

(MIRA 11:12)

(White Russia--Industry)

ASTAF'YEV, I.M.

Conververization of the leather-article production. Mekh. i avtom.
proizv. 16 no.6:37~38 Je '62. (MIRA 15:6)

1. Zamestitel' nachal'nika Upravleniya legkoy promyshlennosti
sovznarkhoza BSSR.
(Minsk--Leather industry--Technological innovations)

ASTAF'YEV, I.M., red.

[Specialization and cooperation in the light industry of
the White Russian S.S.R.] Spetsializatsiya i kooperirova-
nie v legkoi promyshlennosti Belorusskoi SSR. Minsk, Izd-
vo AN BSSR, 1963. 253 p. (MIRA 17:4)

1. Akademiya nauk BSSR, Minsk. Instytut ekonomiki.

ASTAF'YEV, I.M.

Boorruisk Leather Combine. Kozh. obuv. prom. 7 no.5:37-38
My '65. (MORA 18:8)

1. Zamestitel' nachal'nika Upravleniya legkoy promyshlennosti
BSSR.

ASTAF'YEV, I.M.

Expansion of the shoe industry in White Russia. Kozh.-obuv.
prom. 7 no.6:1-3 Je '65. (MIRA 18:8)

1. Zamestitel' nachal'nika Upravleniya legkoy promyshlennosti
Soveta narodnogo khozyaystva BSSR.

Distri: 4E1

Absorption spectra of carbanions
D. N. Gonorin, V. Astaf'ev, and A. I. Israilevich
Akad. Nauk S.S.R. 11, 873 (1958).—The
absorption spectra of solns. of hydrocaron ions in liquid NH₃
in the presence of KNH₂ were determined in the infrared and visible
region of the spectrum at room temp. and 8-10 atm.
to determine the valence state of the solute. The infrared spectra
of Ph₂CH, PhCH₃, indene, and naphthalene were taken in
OCH₃, NH₃, and NH₃ + KNH₂. The spectra in the 1st 2
solvents coincide. The spectra of solns. in NH₃ + KNH₂
indicate the presence of carbonium ions. This was attributed to the ionization of the H by the NH₂ group.
If only a single aromatic ring is attached to the C of the
CH₃ or CH₂ group, as in biphenyl or in toluene, no significant
ionization is brought about by the addition of KNH₂.

A. I. Israilevich
A. I. Shatennikov
J. Kovtar Leach

Phys. Chem. Inst. im. Kurnoz

H. J. C. W.

ASTAF' Y.V., I.V., Cand Chem Sci--(disc) "Spectra of absorption of
cations." No., 1958. 11 pp (State Committee of the Council of
Ministers USSR on Chemistry. Phys-Chem Inst im L.Ya.Lur'ev. Laboratory
of Isotope Reactions); 110 copies (RI, 43-50, 101)

-6-

ASTAF'EV, I.V.

24(7), 5(3), 5(4)

AUTHORS: Astaf'ev, I.V. and Shatenshteyn, A.I.

SOV/51-6-5-12/34

TITLE: The Absorption Spectra of Carbanions (Spektry pogloshcheniya
karbanionov)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 5, pp 631-636 (USSR)

ABSTRACT: A preliminary communication on this subject was published in 1956 (Ref 1). The work on the absorption spectra of these carbanions was undertaken in connection with the study of the mechanism of hydrogen isotope-exchange reactions in hydrocarbons, catalysed with potassium amide in liquid ammonia. Hydrocarbons react then like acids, and ions with trivalent negative carbon (carbanions) are formed. The paper reports studies of the electronic absorption spectra of carbanions formed in ionization of fatty-aromatic hydrocarbons and their derivatives. Spectra of 20 carbanions of the ArCH₂⁻, Ar₂CH⁻, Ar₃C⁻ and other types are reported. A quartz cell of 5-8 ml capacity with plane-parallel optical windows was used as the reaction vessel. The cell was filled with one of the hydrocarbons and a solution of potassium amide in liquid ammonia was added. The technique of obtaining spectra of ammonia solutions at room temperature was that described by Shatenshteyn and Izrailevich (Refs 7, 8). Liquid ammonia was found to leave the

Card 1/3

The Absorption Spectra of Carbanions

SOV/51-6-5-12/34

absorption spectra of the hydrocarbons practically unaffected and the observed displacement of the absorption bands towards long wavelengths is due to formation of carbanions by acidic ionization of the aliphatic C-H bond whose carbon atom is attached to the aromatic ring. In Figs 1-3 the spectra of non-ionized substances dissolved in liquid ammonia (denoted by numbers with primes) are compared with the spectra of their anions (numbers without primes correspond to the numbers of anions in Tables 1-3). The data on the ArCH₂⁻ anions are given in Table 1 and Fig 1, on Ar₂CH⁻ in Table 2 and Figs 1 and 3 and on Ar₃G⁻ in Table 3 and Figs 2, 3. The figures show the value of log ε plotted against wavelength and the tables give the positions of the absorption maxima (λ_{\max}) and values of log ε at these maxima. Certain regularities in the carbanion spectra are described and discussed. The carbanion spectra are compared with the spectra of carbonium ions (carbocations) of similar structure in Table 3, where cols 3 and 4 give the λ_{\max} and log ε_{max} of anions and cols 5 and 6 λ_{\max} and log ε_{max} of cations.

Card 2/3

*The Absorption Spectra of Carbanions

SOV/51-6-5-12/34

Acknowledgments are made to D.A. Drapkina and V.F. Lavrushin for supply of some of the compounds. There are 3 tables, 3 figures and 22 references, 8 of which are Soviet, 12 English and 2 German.

SUBMITTED: June 16, 1958

Card 3/3

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1526,1160

S/190/60/002/011/026/027
B004/B060AUTHORS: Astaf'yev, I. V., Piskunov, A. K.TITLE: Dehydrochlorination of Polyvinyl Chloride by a Solution
of Potassium Amide in Liquid AmmoniaPERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11,
p. 1745

TEXT: The authors wanted to obtain polymers with conjugate double bonds and for this purpose they treated Polyvinyl chloride (molecular weight > 75,000) with potassium amide, solved in NH_3 , under pressure at room temperature. The product was a black powder, insoluble in benzene, which exhibited electron paramagnetic resonance at 9370 Mc/sec. Weight increase and red coloring were observed when allowing the substance to stand in the air. The compound contains no chlorine nor nitrogen. Heating of the black powder yields a readily pulverable black melt, which did not oxidize in the air and which had paramagnetic properties. Melting point of this compound: 400-410°C. Unlike other methods, the use of

Card 1/2

85426

Dehydrochlorination of Polyvinyl Chloride S/190/60/002/011/026/027
by a Solution of Potassium Amide in B004/B060
Liquid Ammonia

potassium amide renders dehydrochlorination possible at low temperatures.²¹
The authors thank A. I. Shatenshteyn and D. N. Shigorin for their interest in the work. There are 4 references: 2 Soviet, 1 German, and 1 Polish.

SUBMITTED: July 5, 1960

Card 2/2

S/140/61/003/004/006/014
B101/B207

AUTHORS: Astaf'yev, I. V., Rabinovich, Ye. A., Shatenshteyn, A. I.
TITLE: The mechanism of initiating styrene polymerization by means of potassium amide in liquid ammonia
PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 4, 1961,
555-559

TEXT: The production of polymers by means of anionic polymerization necessitates the clarification of this process. The present study aimed at determining the structure of the carbanions resulting from the initiation of styrene polymerization by means of NH_2^- ions in liquid NH_3 . The color of 10^{-2} M mole styrene in liquid ammonia was spectrophotometrically examined in the presence of 3 N KNH_2 and compared with the spectra of α - and β -phenyl-ethyl amine recorded under the same conditions. Styrene and β -phenyl-ethyl amine showed similar spectra with the maximum at 550 m μ . Thus, it is concluded that both substances form the same product. The α -phenyl-ethyl amine spectrum, however, differed only little from that of the KNH_2 solution. ✓

Card 1/4

S/196/61/003/004/006/014
B101/B207

The mechanism of . . .

Benzyl amine showed under the same conditions a spectrum with $\lambda_{\text{max}} = 550 \text{ m}\mu$. The styrene spectrum changed only little by reducing the KNH_2 concentration to 0.01-0.02 N, and increasing the styrene concentration to 0.1 mole. This result is discussed, and the following equation given as probable reaction of styrene polymerization initiation: $\text{C}_6\text{H}_5\text{CH}=\text{CH}_2 + \text{NH}_2^+ \rightarrow \text{C}_6\text{H}_5\overset{\cdot}{\text{C}}\text{HCH}_2\text{NH}_2$ (1). Accordingly, NH_2^+ adds to the β -carbon atom of the vinyl group. Fig. 3 lists the results of the spectrophotometric study of the reaction of 1,1-diphenyl ethylene and triphenyl ethylene in liquid NH_3 , and in the presence of 0.01-0.02 N KNH_2 . The absorption curve with $\lambda_{\text{max}} = 440 \text{ m}\mu$ was identical to that for diphenyl-methyl anions ($\text{C}_6\text{H}_5\text{C}_6\text{H}_5\text{CH}_2^+$). The intensity of absorption correspond to a quantitative splitting of the double bond of di- and triphenyl ethylene. Diphenyl-methyl anions were proved by diphenyl methane separation. In the presence of 3 N KNH_2 after a longer period of standing, the spectrum of triphenyl ethylene dissolved in NH_3 showed the formation of a second colored substance (Fig. 3). On the basis of the absorption maximum

Card 2/4

S/190/61/003/004/005/014
B101/B207

The mechanism of ...

at 550 m μ , the substance is assumed to be the same as developed in the reaction between benzyl amine and KNH₂. The authors thank D. N. Kursanov, S. V. Vitt, and S. G. Entelis for the preparations provided, and V. I. Chicherina for his cooperation. There are 3 figures and 12 references: 3 Soviet-bloc and 9 non-Soviet-bloc. The 3 references to English-language publications read as follows: J. J. Sanderson, C. R. Hauser, J. Amer. Chem. Soc., 71, 1595, 1949; C. R. Hauser et al., J. Amer. Chem. Soc., 71, 294, 1949, J. Amer. Chem. Soc., 78, 1653, 1956; P. J. Hamrick, C. R. Hauser, J. Amer. Chem. Soc., 81, 3144, 1959.

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-chemical Institute im. L. Ya. Karpov)

SUBMITTED: July 9, 1960

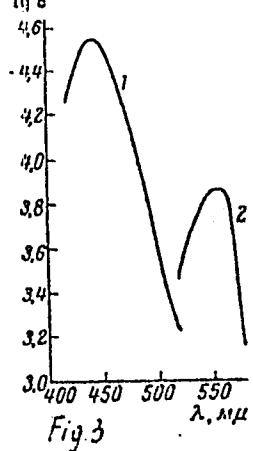
Card 3/4

S/190/61/003/004/006/014
B101/B2C7

The mechanism of ...

Fig. 3: Spectra of the interaction products of 1,1-diphenyl ethylene and triphenyl ethylene with KNH_2 in liquid ammonia.

Legend: 1) 1,1-diphenyl ethylene, triphenyl ethylene, and diphenyl methane (10^{-3} - 10^{-4} mole) in 0.02 N KNH_2 ; 2) triphenyl ethylene (after four days) in 3 N KNH_2 .



Card 4/4

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

SLOVOKHOTOVA, N.A.; ASTAF'YEV, I.V.

Infrared spectra of polymers with conjugated double bond
systems. Vysokom.sosed. 3 no.10:1607 0 '61. (MIRA 14:9)
(Polymers--Spectra)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

38522

S/195/62/003/003/001/002
E075/E436

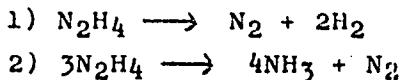
11.1325

AUTHORS: Keyser, N.P., Astaf'yev, I.V.

TITLE: Catalytic activity of organic polymers
II. Catalytic properties of the polymer prepared by
dehydrochlorination of polyvinylidenechloride

PERIODICAL: Kinetika i kataliz, v.3, no.3, 1962, 364-365

TEXT: Catalytic properties of $(CH_2CCl_2)_n$ were investigated in the reactions of decomposition of formic acid, isopropylalcohol, decomposition of hydrazine and oxidation of CO. Formic acid begins to decompose on the freshly prepared catalyst at $240^\circ C$ and the reaction proceeds towards dehydrogenation, the hydrogen being absorbed by the catalyst. The decomposition of isopropylalcohol proceeds similarly with the removal of H and begins at $155^\circ C$. The catalyst prevented the oxidation of CO under 1 to 2 mm Hg pressure up to $250^\circ C$. The decomposition of N_2H_4 proceeded according to the following equations



Card 1/2

Catalytic activity ...

S/195/62/003/003/001/002
E075/E436

The rate of decomposition is retarded by the absorption of NH₃ by the polymer, if it is degassed at 200°C. If the degassing is carried out for 10 to 15 min at the reaction temperature, a constant decomposition rate is reached and the process proceeds mainly according to the second reaction. In the experiments at room temperature, the polymer absorbed strongly H₂, NH₃ and N₂H₄. There is 1 figure.

ASSOCIATION: Institut kataliza SO AN SSSR
(Institute of Catalysis SO AS USSR)

SUBMITTED: December 25, 1961

Card 2/2

RABINOVICH, Ye.A.; ASTAF'YEV, I.V.; SHATENSHTEYN, A.I.

Carbanion mechanism of isomerization of unsaturated hydrocarbons.
Zhur.ob.khim. 32 no.3:748-750 Mr '62. (MIRA 15:3)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(Hydrocarbons) (Carbanions)

ASTAF'YEV, K.V.; KAZANTSEV, G.V.; TSIBUL'SKIY, K.I.; SHCHERBOV, D.P.;
SHMANNIKOV, I.V., redaktor; SERGEYEVA, N.A.; BORISOV, A.S.,
tekhnicheskiy redaktor

[Team and continuous work methods in chemical laboratories]
Brigadno-potochnyi metod raboty v khimicheskikh laboratoriakh.
Trudy lab.geol.upr. no.2:3-47 '52.
(MLRA 7:11)
(Chemical laboratories)

<i>ESTATE YES L.Y.</i>	
8/14/739/000/06/020/020	5/14/739/000/06/020/020
Card 5/11	Card 5/11
AUTHOR: Zolotubin, V.K. TITLE: The Scientific-Technical Conference at Khar'kov. Aviation Institute	PERIODICAL: Izvestiya Vuzovskikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1959, No. 4, pp 101-165 (USSR)
ABSTRACT: In May 1959, the 16th Conference of Professional and Teaching Staff took place. Strength of Aircraft Section. On the Theory of Binding of Thin-Walled Columns by Doeat, Candidate of Technical Sciences L.P. Vasil'yev, "The Simulation of Static Experiments on Thin-Walled Structures by Candidates of Technical Sciences	ABSTRACT: The Strength of Beams Framing on Openings by Candidate of Technical Science L.A. Kolesnikov, "The Influence of the Rigidity of Riba and Beams on their Readings by Assistant E.A. Shilovensky, "The Calculation of the Binding of Rectangular Plate by the Discrete Method by Assistant G.U.P. Paton, "The Calculation of Cylindrical Shells by the Method of Discrete Variables by Assistant M.I. Gur'yan, Engineering Construction Technology Section. The Choice of a Scheme for a Hydraulic Servo-System for the Automation of Welding Processes by Assistant V.V. Polozikov, "An Investigation of the Process of Polishing by an Abrasive Wheel by Senior Instructor, Candidate of Technical Sciences V.M. Terzub; "The Investigation of the Observation of a Unusual Hydraulic Plant by Assistant V.I. Batterov,
Card 6/11	Card 6/11
"A Static Analysis and Calculation of the Accuracy of the Technological Processes of Machining by O.M. Bartholomew, "The Automatical Gain of Long Pensile by Candidate of Technical Sciences L.F. Anashow, "Prospects in the Use of Specialized Computers for the Determination of the Optimum Geometry of Cutting Tools by Doctor Candidate of Technical Sciences F.P. Joncharkov, "The Spreading of the Experience of Innovator and the Classification of Organizational- Technical Measures in Machine Constructions by Senior Instructor M.M. Apanovich, "Effect of Measurable Abrasion of a Cutting Tool in Fine Sharpening by Assistant Y.N. Malikov, "An Investigation of the Process of Compression at High Velocities of Deformations by Dozent, Candidate of Technical Sciences A.K. Belyayev, "The Standardization of Vibration Effects on the Human Organism in Aircraft Production" by Senior Instructor V.D. Ivanov,	"Calculation of Aircraft Engines and Propeller-Driven Machines Section. "One Investigation of the Flow Between the Inlet and Outlet Valves of a Turbine by Instructor, Candidate of Technical Sciences Y.N. Tsvetkov, "The Variation in the Stage Parameters of an Axial Compressor in Accordance with the Size of the Radius Clearance by Assistant A.M. Butovskiy, "A Problem of Non-Stationary Heat Transfer by Assistant S.O. Prokof'ev, "The Influence of an Electric Field on the Flame of a Burner" by Senior Engineer P.P. Kostenko, "Calculation of the Temperature Compensation of Capacitance Pressure Pick-Up" by Assistant L.V. Astaf'ev, Aerohydrodynamic Section. Idea. "The Control of the Boundary Layer or a M.J. Molchanov, "The Control of the Leading Edge by Assistant X.S. Perforation of the Gas-Hydraulic Analogy and its Application by Senior Instructor D.A. Moshchukov; "The Aerodynamic Investigation of Wind Tunnel" for Small Reynolds Number" by Engineer Yu.F. Ushik;
Card 7/11	Card 7/11

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

ASTAF'YEV, M. (Leningrad); BURDAKOVA, O. (Leningrad)

Narrow specialization improves trade. Sov. torg. 35 no.10:35-
37 0 '61. (MIRA 14:12)
(Leningrad---Retail trade)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

SHNAYDER, M.S., ASTAF'YEV, M.P.

Magnetogenic breccias of the Nova-Zolotushinskoye pyrite
complex in the Rudnyy Altai. Sov.geol. 8 no.11;78-90
N '65.
(MIRA 19:1)

ASTAF' YAV, N.

Za otlichniyu organizatsii proizvodstvennykh protsessov [For excellent organization of production processes]. Yaroslavl'. Obizdat. 1952..39 p.

SO: Monthly List of Russian Acquisitions, Vol. 6, No. 2, May 1953

LOGINOV, V.S.; KASHKOVSKAYA, Ye.A.; TARKHANOV, V.V.; ASTAF'YEV, N.A.

Quick-hardening polymer mortar based on phenol-formaldehyde
resins. Stroi.mat. 9 no.3:33-34 Mr '63. (MIRA 16:4)
(Phenol condensation products) (Mortar)

TARKHANOV, V.V.; ASTAF'YEV, N.A.

New method for cutting into asbestos-cement gas pipelines.
Gaz. delo no.4 sl6-20 '64
(MIRA 1727)

1. Saratovskiy gosudarstvennyy nauchno-issledovatel'skiy i
proyektnyy institut po ispol'zovaniyu gaza v narodnom khoz-
yaystve.

ASTAF'YEV, N.G.

Broaden business relations. Izobr. i rats. no.9:8 S '58.

(MIRA 11:10)

1. Predsedatel' Bryanskogo oblastnogo soveta Vsesoyuznogo
obshchestva izobretateley i ratsionalizatorov.
(Bryansk Province--Efficiency, Industrial)

L 25076-65 EMT(1)/EPA(s)-2/EMT(m)/EMF(e)/EPP(n)-2/EPA(w)-2/EEC(t)/EWP(b)
ACCESSION NR: AP5003429 Pub-10/Pt-10/Pu-1/Pl-1 6/0181/65/007/001/0157/0160
i.e.(c) G/WH

AUTHOR: Stekhanov, A. I.; Karamyan, A. A.; Astaf'yev, N. I.

TITLE: Infrared absorption spectra of ferroelectric crystals of the perovskite type

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 157-160

TOPIC TAGS: absorption spectrum, ir absorption spectrum, ferroelectric crystal, perovskite, titanate, group theory

ABSTRACT: In view of the incomplete and contradictory nature of results obtained to date on the infrared spectrum of ferroelectric crystals, the authors investigated the infrared absorption spectra of BaTiO₃, PbTiO₃ and CaTiO₃ at wavelengths 2--300 μ. A Zeiss UR spectrophotometer was used for the 2--25 μ range, and a long-wave spectrometer for the longer waves. The tests were made at room temperature on single-crystal samples and also on powders pressed in polyethylene. The single-crystal barium titanate (thickness 200 μ) was transparent in the 5,000--1,500 cm⁻¹ frequency range, and at lower frequencies weak absorption bands were

Card 1/2

L 25076-65

ACCESSION NR: AP5003429

observed. Two broad and intense absorption bands were observed, centered near 550 and 360 cm⁻¹. Each band had a pronounced triplet structure, with components at 635, 545, 530 and 420, 355, 310 cm⁻¹ respectively. In the far infrared an absorption band was observed at 190 cm⁻¹. The spectra of PbTiO₃ and CaTiO₃ (powdered) showed bands at 400 and 600 cm⁻¹ with pronounced triplet structure. In the long-wave region, bands were observed at 176 and 172 cm⁻¹ for CaTiO₃ and PbTiO₃, respectively. A group-theoretical analysis is presented to interpret the results. It is concluded that further research is necessary on the infrared absorption and Raman spectra in order to obtain complete information of the dynamics of such crystals. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad
(Physicotechnical Institute, AN SSSR)

SUBMITTED: 08Jul64

ENCL: 00

SUB CODE: SS, OP

NR REF Sov: 004

OTHER: 007

Card 2/2

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

ASTAF'YEV, N.I., dotsent (Khar'kov); LITINSKIY, S.M., (Khar'kov)

Compact loading of large freight units. Zhel. dor. transp.
47 no.6:37-38 Je '65. (MIRA 18:6)

1. Starshiy inzh. gruzovoy sluzhby Yuzhnay dorogi (for Litinskiy).

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

ASTAF'YEV, N.N.

Reconditioning jaws of sliding calipers. Izm.tekh. no.1:61 Ja
'60. (MIRA 13:5)
(Calipers--Maintenance and repair)

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

ALTAI'EV, N. A.

ALTAI'EV, N. A.--"Raising the Technical-economic Indexes of Rural Electrical Networks." Min Higher Education USSR. Moscow: Inst of the Mechanization and Electrification of Agriculture imeni V. M. Molotov. Chair of "Production and Distribution of Electric Power in Agriculture." Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhanay letopis'
No 2, 1956

Astaf'yev, N. N.

112-3-5555

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 3,
p. 70 (USSR)

AUTHORS: Budzko, I. A., Astaf'yev, N. N.

TITLE: The Number of Transformer Points in a Rural Community
(O chisle transformatornykh punktov v selenii)

PERIODICAL: Mekhaniz. i elektrifik. sots. s. kh. 1956, Nr 1, pp. 42-44

ABSTRACT: The optimum number of transformer points in a village is determined on the basis of minimum expenditures associated with the construction of a network. In the design calculations it is assumed that the transformer points have an active load and that a change in number of transformer points will have no effect on the cost of a 6-10 kv network. Formulae obtained for a branched network and an unbranched network of 380 v. enable determination of the optimum number of transformer points in a community before the cross sections of the conductors are determined. V. Ya. R.

Card 1/1

ASTAF'YEV, N. N.

BUDZKO, I.A., doktor tekhnicheskikh nauk, professor; ASTAF'YEV, N.N.,
kandidat tekhnicheskikh nauk.

Distributing permissible voltage drop in rural networks.
Elektrichestvo no.4:39-40 Ap '57. (MLRA 10:5)

1. Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo
khozyaystva im. Molotova.
(Electric networks)

SERGOVANTSIEV, V.T., kand.tekhn.nauk; YURASOV, V.V., kand.tekhn.nauk;
ALUKER, Sh.M., kand.tekhn.nauk; ANDRIANOV, V.N., doktor tekhn.
nauk; ASTAF'YEV, N.H., kand.tekhn.nauk; BUDZKO, I.A., akademik;
BYSTRITSKIY, D.N., kand.tekhn.nauk; VEYALIS, B.S., kand.tekhn.
nauk; GIRSHBERG, V.V., inzh.; GORSHKOV, Ye.M., inzh.; GRI-
CHEVSKIY, E.Ya., inzh.; ZAKHARIN, A.G., doktor tekhn.nauk;
ZLATKOVSKIY, A.P., kand.tekhn.nauk; IOSIPYAN, S.G., inzh.;
ITSEKOVICH, A.M., detsent; KAUFMAN, B.M., inzh.; KVITKO, M.N.,
inzh.; KORSHUNOV, A.P., inzh.; LEVIN, M.S., kand.tekhn.nauk;
LOBANOV, V.N., detsent; LITVINENKO, A.F., inzh.; MERKELOV,
G.F., inzh.; PIRKHAVKA, P.Ya., kand.tekhn.nauk; PRONNIKOVA,
N.I., kand.tekhn.nauk; SMIRNOV, B.V., kand.tekhn.nauk; FAYU-
SHENKO, S.G., inzh.; KHODNEV, V.V., inzh.; SHCHATS, Ye.L.,
kand.tekhn.nauk; EBIN, L.Ie., doktor tekhn.nauk; ENTIN, I.A.,
kand.tekhn.nauk; SILIN, V.S., red.; SMELYANSKIY, V.A., red.;
HALLOD, A.I., tekhn.red.; SMIRNOVA, Ye.A., tekhn.red.

[Handbook pertaining to the production and distribution of
electricity in agriculture] Spravochnik po proizvodstvu i
raspredelenii elektricheskoi energii v sel'skom khoziaistve.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 900 p. (MIRA 13:2)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni
V.I.Lenina (for Budzko).
(Rural electrification)

BUDEKO, I.A.; ASTAF'YEV, N.N.; ARKHPOV, N.K.

Calculation of electric networks with consideration of the
permissible voltage loss. Elektrichestvo no.7:90-92 Jl '61.
(MIRA 14:9)

(Electric power distribution)

ASTAF'YEV, N.N., kand.tekhn.nauk; MOROZOV, V.A., inzh.; BUKI, A.A., inzh.

Using nonlinear chains for the accurate measurement of current strength. Svar. proizv. no.10:33-35 0 '63. (MIRA 16:11)

1. Kishinevskiy sel'skokhozyaystvennyy institut (for Morozov).
2. Institut energetiki AN Moldavskoy SSR (for Buki).

L 57852-65 EWT(m)/EWP(v)/T/ENP(t)/ENP(x)/EWP(b)/EWA(c) PI-4 JD/HM

ACCISSION NR: AP5012642

UR/0135/65/000/005/0014/0016
621.791.011:621.791.92 23 33

AUTHOR: Buki, A. A. (Engineer); Astaf'yev, N. N. (Candidate of technical sciences)

TITLE: On the causes of burnout of elements of the parent and filler metal in vibroarc build-up welding

SOURCE: Svarochnoye proizvodstvo, no. 5, 1965, 14-16

TOPIC TAGS: metal surfacing, vibroarc welding, filler electrodes, weld metal

ABSTRACT: Tests were made to determine the reasons for the burnout of steel components in build-up welding with a discontinuous arc, and methods for preventing this effect are discussed. It is shown that carbon burnout depends basically on the burning time of the welding arc and that the longer the burning period, the greater the losses of carbon during transfer of the filler metal through the arc interval. Manganese and silicon burnout depend basically on the total time of arc burning and idle periods (pulse frequencies). When this time is increased the burnout of these elements is decreased. It is concluded that in order to increase the transfer of the components of an electrode wire to the build-up layer in vibroarc welding it is

Card 1/2

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

L 51852-65

ACCISSION NR: AP5012642

necessary to decrease the arc burning and idle periods (increase the pulse frequency). Orig. art. has: 2 tables.

ASSOCIATION: Kishinevskiy sel'skokhozyaystvennyy institut im. M. V. Frunze
(Kishinev Agricultural Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 011

OTHER: 000

dm
Card 2/2

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

PETROV, Yur. Yu.; STEPANOV, N.N., kand. tekhn. nauk; MOROZOV, V.A., inzh.

Use of toroids as a choke coil for pulsation-arc hard facing.
Sver. proizv. no. 10:29-32 O '65. (MIRA 18:10)

1. Kishinevskiy sel'skokhozyaystvennyy institut im. M.V. Frunze.
2. Chlen-korrespondent AN Moldavskoy SSR (for Petrov).

APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1"

L 16739.66 EWT(m)/EMP(u)/EMP(v)/T/EMP(t)/EMP(k) JD/HM
AC NIG AR5018397 SOURCE CODE: UR/0196/65/000/006/N018/N018

AUTHOR: Astaf'yev, N.N.; Morozov, V.A.

58

B

ORG: none

TITLE: Effect of impulse-arc surfacing on the mechanical properties of coating

44,53, 16

14

47,5579

SOURCE: Ref. zh. Elektrotehnika i energetika, Aba. QN121

REF SOURCE: Dokl. Nauchn. konferentsii professorov i prepodavat. Kishinevsk. s.-kh. in-ta, 1963. Kishinev, Kartya Moldovenyiske, 1964, 216-223

TOPIC TAGS: welding, arc welding, welding equipment, welding technology, metal surfacing, electric arc, electronic rectifier, heat effect, metallographic examination, solid mechanical property, VAGG-12-600M electronic rectifier

TRANSLATION: An analysis was made of voltage stability and of the choke parameters with regard to the quality of the coating in impulse-arc surfacing. The power source was either a VAGG-12-600M rectifier or a special comprehensive unit. Inasmuch as the voltage curve of the latter is more even and more stable, the hardness, adherence, wear resistance and durability of the plating proved to be higher than in cases of feeding by rectifier. Metallographic research showed that the number of pores and cracks decreased and the area of thermal effect became smaller. A study was made of the effect of the induction variations in a RST-24 choke and a toroid with a core made from light

Card 1/2

UDC: 621.791.927.5

L 16739-66

ACC NR: AR5018397

carbon wire 0.5 mm in diameter. The optimal value of the RST-24 choke inductance in surfacing with a 1.6 mm wire and a feeding from a VAGG-12-600M rectifier was 0.11 - 0.15 millihenry. With an identical static inductance of the choke and toroid, the number of loops in the toroid must be 6 times greater. The core of the choke may be made of steel with great loss in hysteresis. V. Goraskiy.

SUB CODE: 13,09/

SUBM DATE: none

Card: 2/2 vmb

ASTAF'YEV, N.V.; RUBINOVICH, R.S.; YAKOVLEVVA, S.A.

Spectral determination of nickel, chromium, and copper in clays.
Izv. AN SSSR. Ser. fiz. 19 no. 2:192-193 Mr-Ap '55. (MLRA 9:1)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.
(Tartu--Spectrum analysis--Congresses)

ASTAF'YEV, N.V.

Use of polarography in the analysis of raw minerals. Zav.lab.
28 no.7:887-888 '62 (MIRA 15:6)

1. Tsentral'naya laboratoriya Yuzhno-Kazakhstanskogo geologicheskogo
upravleniya.
(Minerals--Analysis) (Polarography)

"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

GRIGOR'YEV, P.N.; ASTAF'YEV, P.I.; BAREYEV, M.B.

Method for processing factual data on drilling techniques. Neft.
khoz, 43 no.9:1-7 S '65. (MIRI 18:10)

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CIA-RDP86-00513R000102410020-1"

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CIA-RDP86-00513R000102410020-1

ASTAF'YEV, I.I.; BARTOV, M.B.; GRIGOR'YEV, P.N.; LITVAKOV, Yu.P.

Comparative efficiency of drilling using bits of decreased
diameter with various bottom-hole engines. Neft. khoz. 43

no. 210-15 F '65.

(MTRA 18:4)

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CIA-RDP86-00513R000102410020-1

GRIGOR'YEV, P.N.; IL'YASOV, Ye.P.; ASPAF'YEV, P.L.; BAREYEV, M.B.

Nature of the wear of bit rigging during drilling. Neft. khoz.
43 no.3:12-15 Mr '65. (MIRA 18:6)

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"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000102410020-1

MISHCHEVICH, V.I.; KUZNETSOV, V.S.; ASTAF'YEV, P.I.

Use of axial pumps in oil well drilling. Neft. khoz. 43 no.6:
56-60 Je '65. (MIRA 18:7)

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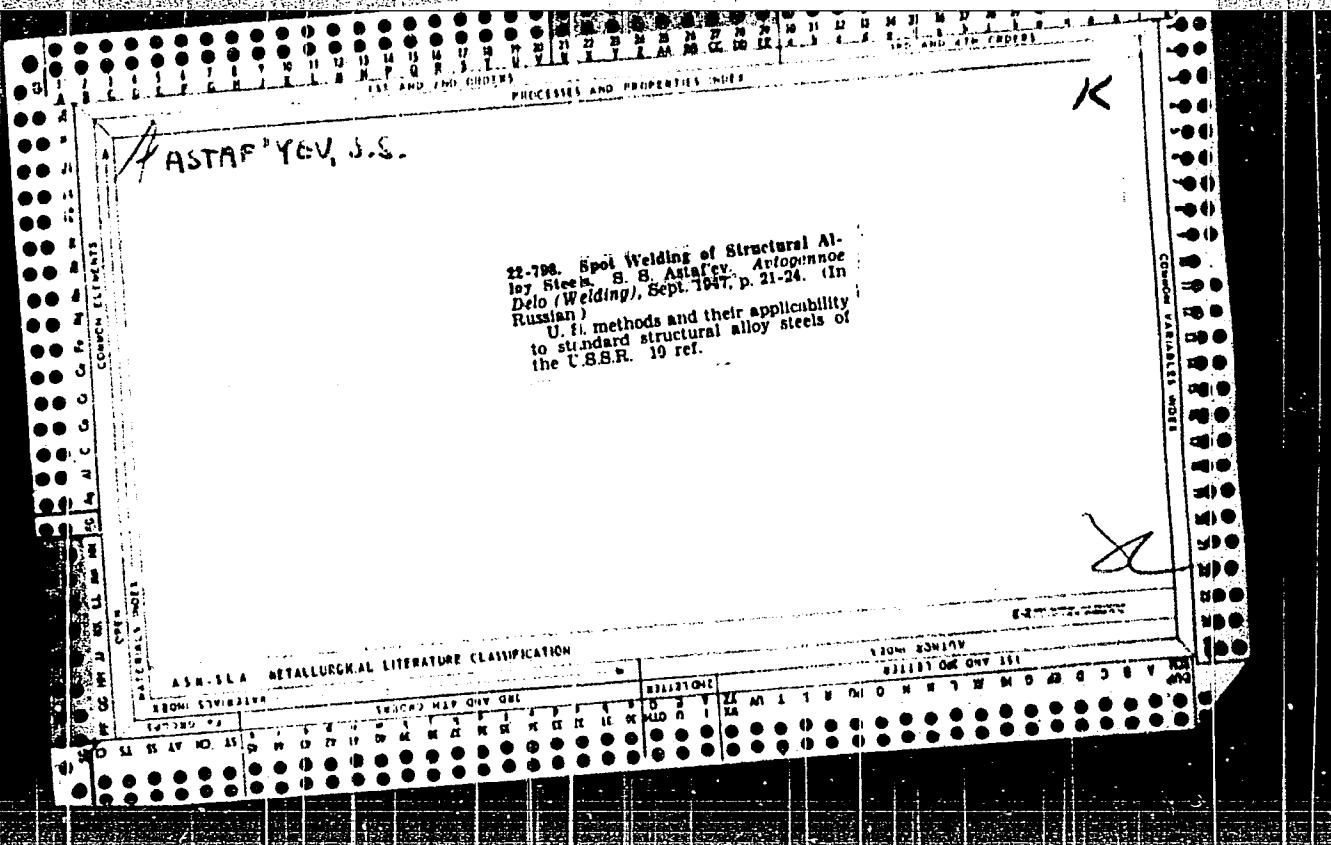
ASTAF'YEV, S.A.

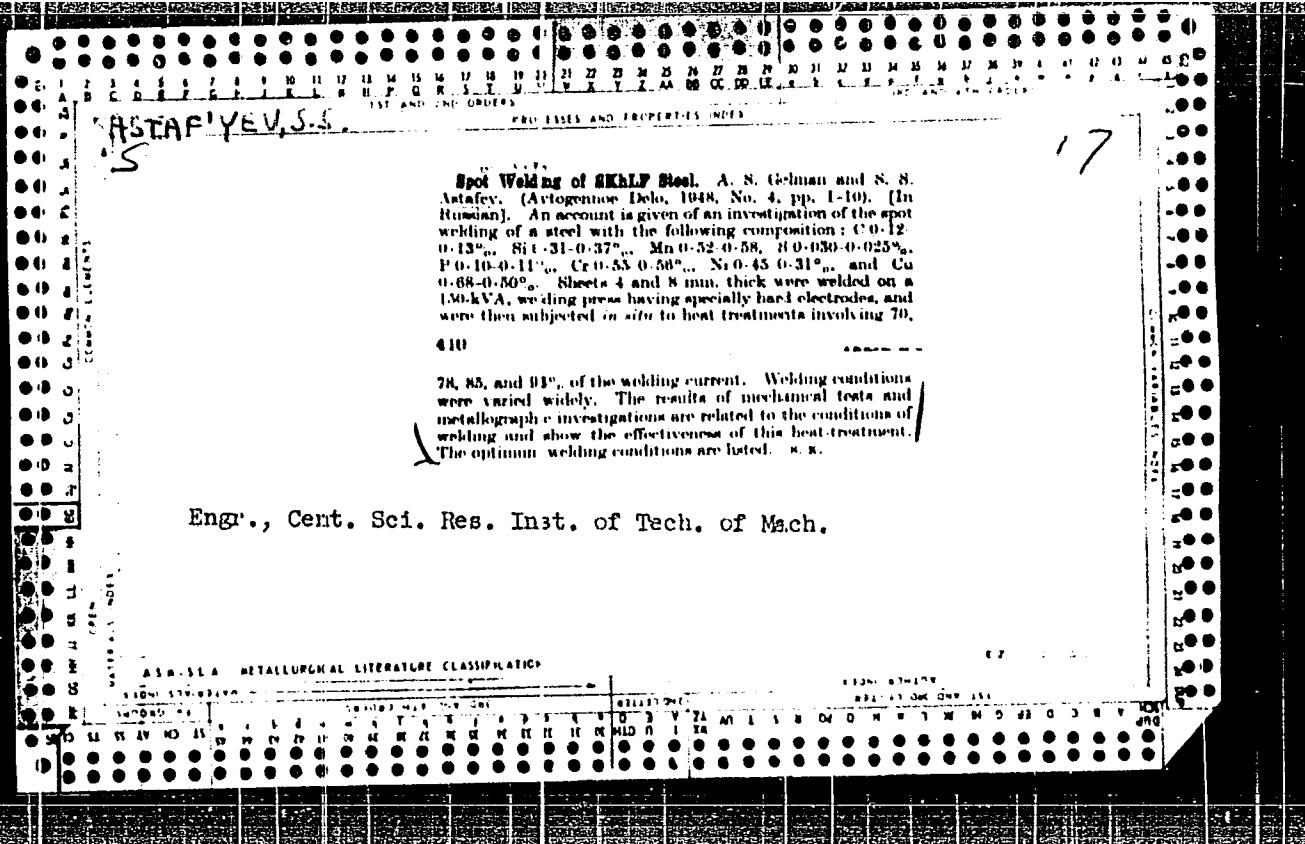
Device for soil packing. Rats. i izobr. predl. v stroi. no. 7:33-34
'58. (MIRA 11:12)

(Earthwork)

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CIA-RDP86-00513R000102410020-1"





ASTAF'EV, S.S.

Spot-Welding of SKhL-2 Steel with Electric Heat-Treatment. A. S. Gel'man and S. S. Astaf'ev. (Avtog. Delo, 1949, No. 11, 7-14). (In Russian). Experiments are described on the properties of spot welds produced with subsequent electrical heat-treatment. Specimen pairs of plates of the same thickness, 4, 5, and 7 mm. thick, were used of low-alloy steels (Cr 0.4-0.8%, Ni 0.3-0.7%, Cu 0.3-0.5%). Temperatures at the specimen-electrode contact surface were measured by thermocouples built into the electrode, and the time-temperature curve for optimum conditions is given. Tensile tests and hardness traverses extending 1 cm. on either side of the spot welds were made. On the basis of these tests the minimum length of time between the end of welding and the start of the heat-treatment *in situ* was determined. Macro- and microstructures of the spot and base metals are reproduced to show that, as a result of the electrical heat-treatment, tempering and partial recrystallization take place, accounting for the improved properties. The effect of electrical heat-treatment increases with decreasing specimen thickness and increasing hardenability. The advantages of the process are: (1) High plastic properties of the joints obtained make the process suitable for structures of alloy steels hardenable under the conditions of rapid cooling in the spot zone; (2) small deformations on welding, due to the short duration of the heat treatment; and (3) moderate current consumption. The disadvantages are the necessity for more powerful equipment and the greater duration of the welding cycle. The process is recommended for low-alloy structural steels and for pearlitic alloy steels, e.g., Chromansil, -- S.K.

ASTAF'YEV, S.S.; kandidat tekhnicheskikh nauk; BRONOVSKIY, G.A., inzhener.

Test results of carbon-steel hydroturbine blades. Vest.mash. 33 no.9:24-27
S '53. (MLRA 6:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya. 2. Leningradskiy metallurgicheskiy zavod (for Bronovskiy). (Blades)

ASTAF'YEV, S.S., kandidat tekhnicheskikh nauk. (Reviewer)

"Electric contact welding." N.P.Sergeev, M.S.Felgenson. Reviewed by
S.S.Astaf'ev. Vest.mash.34 no.4:105 Ap '54. (MLRA 7:5)
(Electric welding) (Sergeev, N.P.) (Felgenson, M.S.)

IVANOV, Georgiy Petrovich, kandidat tekhnicheskikh nauk; ASTAF'YEV, S.S.,
kandidat tekhnicheskikh nauk, redaktor; POPOLOV, L.Ya., inzhener,
retsenzent; UVAROV, A.F., tekhnicheskiy redaktor.

[Technology of electric spark hardening of tools and machine parts]
Tekhnologija elektroiskrovogo uprachnenija instrumentov i detalей
mashin. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,
1957. 187 p.
(Electric spark) (Metals—Hardening)

ASIAF.yev S.S.

PLATE 1 BOOK REPORTS

Rev/1950.

Centralnyy nauchno-issledovatel'skiy institut tekhnologii i mehanicheskogo

Elektrosvarkovaya obrabotka i elektricheskoye upravleniye [electrical
(Electric) heat treatment and Electropark Hardening or Parts Collection of
Articles] Moscow, 1958. 24k. P. (Series: Tras [Study] No. 85)

5,000 copies printed.

M. I. Ilin. Mekhanicheskiy inzhener (Graduate) Ed. of Publishing House L. T.
Golyanov Tech. Ed. A. F. Ovchinnikov Ed. for literature on General Tech-
nical and Transport Machine Building (Mechanics); Ed. Prochnost', Equipment.

PURPOSE: This collection of articles is intended for engineers, scientists of plant
and scientific research institutes dealing with electric heating, electric heat-
treatment, and electropark hardening of metals.

CONTENTS: This collection of articles presents the results of scientific research
work carried out by the Department of Scientific Research (Central Scientific Research
Institute of Technology and Machinery) on electric heating in the field of high
and industrial-frequency heating and electropark hardening of machine parts.
The process of surface hardening, through hardening and tempering of steel,
and cast iron using induction-heating and electroheat methods, and the results
of investigation of the effects of electric-heat treatment and electropark
hardening on the properties of steel and cast iron are described. A brief re-
view of industrial applications of induction and cast iron containing the Soviet stan-
dard developed by TsNIIKhach are also presented. Various electric-heating and electropark equipment
used in various enterprises are described. The book was written based on equi-
pment by GCI, and by other milder cooling agents, and the effect of the
temperature of annealing and the effect of the

temperature of annealing are also discussed.

Lagutinoff, B.A., Inzhener, Inventor's Equipment for Industrial Frequency

Induction Heating

The author discusses various types of inductors, including

flexible ones, for sectional heating of large parts up to 50

cycles and up to 50 volts current. The simplicity of the construction

of such inductors is indicated.

Zemlyar, G.P., Candidate of Technical Sciences. Structure, Hardness, and Depth

of a Layer Hardened by the Electropark Method

The author discusses the mechanics of the electropark hardening
process and the effect of the current used and hardening time on the
structure and depth of the layer. The dependence of hardness on the
processing regime and on the carbon content in processed metal is dis-
cussed. Results of analysis of the structure are given. The author
states that methods for mechanization of this process are now being de-
veloped.

Lagutinoff, B. A., Candidate of Technical Sciences. Electrospark Equipment

for a Layer Hardened by the Electropark Method

The author discusses the mechanics of the electrospark hardening
process and the effect of the current used and hardening time on the
processing regime and on the carbon content in processed metal is dis-
cussed. Results of analysis of the structure are given. The author
states that methods for mechanization of this process are now being de-
veloped.

3

ABRAMOVICH, I.I., prof., ANBINDER, A.G., inzh., ANTOSHIN, Ye.V., inzh., ARKHANGEL'SKIY, L.A., inzh., ASTAF'YEV, S.S., kand. tekhn. nauk, AFANAS'YEV, L.A., inzh., BARGSHTEYN, I.I., inzh., BORISOV, Yu. S., inzh., red., BYALYY, I.L., inzh., VETVITSKIY, A.M., inzh., GERSHMAN, D.Kh., inzh., GJNZBURG, Z.M., inzh., GOROSHKIN, A.K., inzh., YEVDOKIMCHIK, Kh.I., inzh., ZHIKH, V.A., kand. tekhn. nauk, ZABYVAYEV, Ye. I., kand. tekhn. nauk, [deceased], ZOBIN, V.S., inzh., IVANOV, G.P., kand. tekhn nauk, KAPRANOV, P.N., inzh., KONDRAUTOVICH, V.M., inzh., KOSTEREV, S.K., inzh., KOVAL'SKIY, N.N., inzh., KRUGLYAK, L.A., inzh., LUKYANOV, T.P., inzh., LAPIDUS, A.S., kand. tekhn. nauk, LIVSHITS, G.A., kand.tekhn. nauk, LISHANSKIY, I.M., inzh., MIGALINA, Ye.Ya., inzh., NOSKIN, R.A., kand. tekhn. nauk; ., PRONIKOV, A.S., doktor tekhn.nauk, REGIRER, Z.L., kand. tekhn. nauk, RUDYK, M.A., inzh., SOKOLOVA, N.V., inzh., SAKLINSKIY, V.V., inzh., SAKHAROV, V.P., inzh., TOKAR', M.KH., inzh., SKACHEVSKIY, G.I., inzh., KHRUNICHEV, Yu.A., kand. tekhn. nauk, TSOPIN, K.G., inzh., red.; SHEYNGOL'D, Ye. M., inzh., SOKOLOVA, T.F., tekhn. red.

[Handbook for machinists of machinery plants in two volumes] Spravochnik mekhanika mashinostroitel'nogo zavoda v dvukh tomakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry. Vol. 2.[The technology of repair work] Tekhnologiya remonta. Otv. red. toma IU. S. Borisov, 1958. 1059 p.

(MIRA 11:10)

(Machine--Maintenance and repair)
(Machine-shop practice)

ASTAE'YEV S.S.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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which gives the natural thermocouple of which one terminal is the melting surface and the other is the coating metal. The interest was aroused by the paper "The Activation of Certain Alloyed Iron Alloys under Nuclear Radiation" (G. J. ZELINSKI AND R. H. SCHAFFNER) which states that the precipitation-hardening alloy KH-150 (Mn 15%) has a nuclear radiation resistance increased by a factor of 100. The properties mainly affected are the phase transformation temperature and the grain size.

The first investigation was made by the foundations of the Soviet Academy of Sciences. It involved the use of a candidate of technical sciences for studies of the effect of the chemical and structural changes in iron-carbon alloys on their resistance to cavitation erosion. Increasing the carbon content from 0.02% to 0.05% increased the resistance. The effect of alloying elements on the metallurgical structure and the erosion resistance is of interest. In spheroidal graphite

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